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Appl. No. 09/211,691  
Amdt. dated November 27, 2006  
Reply to Office Action of May 26, 2006PATENT**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1-36. (Cancelled)
37. (Currently amended) An isolated nucleic acid that encodes a fusion polypeptide, wherein the fusion polypeptide comprises:
- a) ~~an~~ a *Neisseria meningitidis* (*N. meningitidis*)  $\alpha$ -2,3-sialyltransferase that catalyzes the transfer of a sialic acid, from CMP-Neu5Ac, to an acceptor molecule; and
  - b) a *N. meningitidis* CMP-Neu5Ac synthetase that catalyzes the formation of CMP-Neu5Ac from Neu5Ac and CTP.
38. (Currently amended) The nucleic acid of claim 37, wherein the *N. meningitidis*  $\alpha$ -2,3-sialyltransferase and the *N. meningitidis* CMP-Neu5Ac synthetase are joined by a peptide linker.
39. (Previously presented) The nucleic acid of claim 37, wherein the nucleic acid further comprises a polynucleotide that encodes a signal sequence which is linked to the fusion polypeptide
40. (Previously presented) The nucleic acid of claim 37, wherein the nucleic acid further comprises a polynucleotide that encodes a molecular tag which is linked to the fusion polypeptide.
- 41-43. (Cancelled)
44. (Previously presented) An expression vector which comprises the nucleic acid of claim 37.

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45. (Previously presented) A host cell which comprises the expression vector of claim 44.

46. (Previously presented) A method of producing a fusion polypeptide, the method comprising:

- a) introducing into a host cell the expression vector of claim 45, under conditions where the host cell is transformed with the expression vector; and
- b) culturing the transformed host cell under conditions where the fusion polypeptide is expressed in the transformed host cell.

47. (Previously presented) The method of claim 46 further comprising a step of purifying the expressed fusion polypeptide.

48. (Previously presented) The method of claim 46 further comprising a step of permeabilizing the host cell expressing the fusion polypeptide.

49. (Currently amended) The fusion polypeptide of claim 37, wherein the N. meningitidis CMP-Neu5Ac synthetase is encoded by a nucleic acid that is amplified by a first primer of SEQ ID NO:3 and ~~a second primer~~ of SEQ ID NO:4.

50. (Currently amended) The fusion polypeptide of claim 37, wherein the N. meningitidis  $\alpha$ -2,3-sialyltransferase is encoded by a nucleic acid that is amplified by ~~a first primer~~ of SEQ ID NO:5 and ~~a second primer~~ of SEQ ID NO:6.

51. (Currently amended) The fusion polypeptide of claim 49, wherein the N. meningitidis  $\alpha$ -2,3-sialyltransferase is encoded by a nucleic acid that is amplified by ~~a third primer~~ of SEQ ID NO:5 and ~~a fourth primer~~ of SEQ ID NO:6.